

Company **Prairie**

Sec. 20 T. 9 R. 18W
Loc.

Farm **Sandberg**

No. 1

Total Depth

Comm.

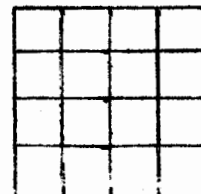
Shot or Treated

Contractor

Issued

Comp.

County **Rooks**



Casing

20 in.

15 1/2

12 1/2

13 3/8

10 in.

8 1/4

6 5/8

5 3/16

Elevation

Production

Figures Indicate Bottom of Formation

45-170

Cretaceous

Smoky Hill

Chalky gray shale, very fossiliferous.

170-220

Ft. Hayes

Chalky white limestone, very fossiliferous.

220-450

Carlisle

Dark gray fissile shale.

450-461

Greenhorn Limestone

Chalky dark gray shale.

Inoceramus beds.

461-467

Chalky dark gray shale, as above.

Graneros

467-505

Gray chalky shale.

505-511

As above with limestone.

511-527

Gray chalky shale.

527-532

As above and dark gray shale.

532-539

Dark gray shale.

539-593

Dark gray shale, shell beds and chalk.

593-599

Dark gray shale.

599-639

Dark gray chalky shale.

639-642

Platy dark gray shale.

642-647

Brown shale and gray angular sandstone,

pyritiferous.

647-652

Gray shale and angular sandstone.

652-656

Brown dense shale.

656-661

As above with black shale, and dolomite pelts.

661-670

Gray shale.

670-678

Dark gray shale.

678-687

As above with some sand.

Figures Indicate Bottom of Formation

687-692	Gray and black shale.
692-698	Gray shale, sand, and dolomite pellets.
698-704	As above with some coal.
704-714	Angular sandstone.
714-718	Angular sandstone, and red brown dense nodules.
718-723	Dark gray shale..
723-728	Dark gray shale, angular sandstone, very fossiliferous. <u>Oysters,</u>
728-734	Dark gray fissile shale with dolomite pellets. <u>etc.</u>
734-739	As above with some frosted sand.
739-745	Dolomite pellets.
745-750	As above in pink shale.
750-765	Dolomite pellets in maroon shale.
765-770	Dolomite pellets in pink shale.
770-776	Dolomite pellets in pink and white shale.
776-782	Dolomite pellets in maroon shale.
782-789	As above.
789-796	As above with some sand.
796-801	Dolomite pellets in maroon shale.
801-820	Dolomite pellets in gray and maroon shale.
820-825	Maroon shale.
825-835	Angular sand.
835-868	Angular sand, with alternating beds of maroon shale and dolomite
868-880	Angular sand. pellets.
880-890	Maroon shale, dolomite pellets, and some shale.
890-909	Maroon shale and sand. pellets and some shale.
909-920	Angular sand. some coal.
920-925	Angular sand and a trace of gray shale..
925-950	Angular sand with some dolomite pellets and maroon shale.
950-970	Angular sand with some coal.
970-977	Angular sand and trace of maroon shale.
	Note: The above sandstone series is probably Dakota.
	<u>Fuson</u>
977-985	Tight gray dolomite sand.
983-1000	Gray shale with some sand.
1000-1010	Angular sand with dense brown dolomite and pyrite.
1010-1015	Angular sand, gray shale, and pyrite..
1015-1020	Gray shale.
1020-1025	Buff shale.
1025-1030	Gray shale.
1035-1045	Gray shale and frosted sand.
	<u>Dakota</u>
1043-1054	Frosted sand.
1054-1060	Frosted sand and trace of gray shale.
1060-1072	Frosted sand.
1072-1077	Dark gray shale. <u>Ostrea.</u>
1077-1106	Frosted sand.
1106-1110	As above with some black shale.
1110-1129	Frosted sand with much pyrite.
1129-1134	As above with black shale and dolomite.
1134-1147	Angular to frosted sand and dolomite.
1147-1190	Angular to frosted sand.

Figures Indicate Bottom of Formation

Permian

Whitehorse

1190-1280	Frosted sand, pale pink cast, grades to orange.
1280-1285	As above with terra cotta shale.
1285-1305	Frosted orange sand.
1305-1310	Terra cotta shale.
1310-1320	As above with orange sand.
1320-1330	Angular to frosted orange sand.
1330-1360	As above with some terra cotta shale.
1360-1365	Angular to frosted orange sand.
1375-1380	Terra cotta shale. orange sand.
1380-1385	Orange sand.
1385-1395	Terra cotta shale.
1395-1410	Angular to frosted orange sand.
1410-1420	Terra cotta shale.
1420-1440	Angular to frosted sand.
1440-1450	Terra cotta shale.
1450-1475	Angular to frosted sand, orange
1475-1485	As above with some terra cotta shale.
1485-1495	Orange sand.
1495-1500	Orange sand and terra cotta shale.
1500-1535	Angular to frosted orange sand.

Note: The next 100' may be younger than Wellington, however, it probably belongs with the material below which is Wellington.

1535-1545	Angular frosted sand and trace of gyp,
1545-1575	Gyp and anhydrite.
1575-1580	Gyp and anhydrite and red brown grits.
1580-1590	As above.
1590-1610	Brown shale.
1610-1640	Brown shale, trace of gray shale and gyp.
1640-1645	As above with light and dark gray shale.
1645-1660	Gray and brown shale with anhydrite.
1660-1695	Mostly brown shale with some anhydrite.
1695-1705	Gray shale with some anhydrite.
1705-1760	Gray shale with some brown shale and anhydrite.
1760-1780	Gray shale and anhydrite.
1780-1820	Gray marly anhydrite.
1820-1835	Brown shale.
1835-1860	Gray marly anhydrite, some anhydrite.
1860-1870	Gray and brown shale.
1870-1880	Gray marly anhydrite.
1880-1920	Salt.
1920-1985	Gray and brown shale with some salt and anhydrite.
1985-2030	Gray marly anhydrite with anhydrite.
2030-2035	Gray shale and anhydrite.
2035-2045	Anhydrite.

Marion

Pearl shale.

2045-2065	Gray shale with some anhydrite.
2065-2070	As above with some buff dolomite.

Figures Indicate Bottom of Formation

2070-2075 Brown shale and anhydrite.
2075-2085 Buff dolomite limestone, mottled with some anhydrite.
2085-2090 Speckled buff dolomite.
2090-2112 Gray and brown shale, some grits.

Harrington

2112-2119 Porous buff dolomite and brown shale.
2119-2125 Porous buff dolomite, sucrose.
2125-2135 Fine gray sucrose dolomite and brown shale.
2135-2142 Porous gray to buff dolomite.

Enterprise shale.

2142-2152 Brown shale.
2152-2165 Gray and brown shale.

Luta Limestone

2165-2175 Porous gray sucrose dolomite, trace of chert.
2175-2180 As above.

Doyle shale.

2180-2185 Gray and brown shale.
2190-2230 Gray and brown shale.
2230-2240 Gray and brown shale and some grits.

Ft. Riley

Florence Flint

2240-2245 Granular buff porous dolomite, fossiliferous.
2245-2260 Gritty brown shale.
2260-2290 Buff porous sucrose dolomite.
2290-2300 Marly limestone.
2300-2310 Gray shale, some brown shale, and marl.
2310-2330 Gray marly limestone, with some chert, very fossiliferous.

Matfield shale.

2330-2340 Brown shale, with some gray shale.
2340-2350 As above with trace of limestone.
2350-2360 Buff porous limestone with some oolitic.
2360-2370 Brown shale.
2370-2378 Brown and gray shale with some limestone.

Wreford

2390-2410 Gray marly granular limestone.

Garrison-Cottonwood

2410-2420 Brown shale.
2420-2430 Brown shale, gray shale, and some limestone.
2430-2450 Brown and gray shale with some gyp.
2450-2460 Marly gray shale.
2460-2470 Brown shale.

Figures Indicate Bottom of Formation

cont. from page four

2470-2475 Buff porous granular limestone.
2475-2480 As above with gray brown shale and gyp.
2480-2495 Gray and brown shale.
2495-2500 As above with some limestone.
2500-2510 Gray green shale, buff limestone, and some brown shale.

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2510-2520 Brown shale, gyp and limestone.
2520-2530 Brown shale and some limestone.
2530-2538 Buff finely crystalline limestone. Fusulina dunbari
2538-2545 As above with some green shale.
2545-2570 Brown and some gray green shale and gyp.
2570-2585 Buff porous crystalline limestone.
2585-2590 Dense oolitic limestone.
2590-2595 Buff cherty limestone.
2595-2600 Gray and brown shale.
2600-2620 Buff porous sucrose limestone and dolomite.
2620-2630 As above with trace of gray shale.
2630-2635 Gray shale and trace of lime.
2635-2645 Gray and brown shale.
2645-2656 Brown shale and buff limestone.
2656-2667 Gray shale and marl.
2667-2677 Gray shale, buff limestone, and gray chert. Triticites ventricosus.
2677-2687 Gray and brown shale.

Neva

2687-2702 Gray granular limestone and chert.
2702-2715 Gray granular limestone. Triticites ventricosus, tuvidus
2715-2725 Gray and brown shale with cherty limestone.

Pennsylvanian

Wabaunsee

2725-2733 Gray shale.
2733-2740 Gray granular marl and brown shale.
2740-2755 Gray granular lime and some chert.
2755-2770 Granular gray shale.

Americus

2770-2785 Buff dense dolomite, and limestone. Triticites ventricosus, sp.
Douglass
2925-2945 Dark gray shale.
2945-2950 Light gray limestone, finely crystalline.
2950-2958 As above with gray shale.
2958-2965 Porous buff sucrose limestone.

Figures Indicate Bottom of Formation

2965-2973	Limestone and gray shale. <u>Triticites 2sp.</u>
2973-2980	Marly limestone and gray shale.
2980-2985	Gray shale.
2985-2995	Gray shale and limestone shells.
2995-3000	Gray and brown shale, sucrose buff porous limestone
3000-3005	Gray green shale and buff limestone. <u>Triticites beedei. Ervine</u>
3020-3025	Gray shale grits and maroon shale. <u>Creek</u>
3025-3030	As above without maroon shale.
3030-3035	Gray and brown shale.
3035-3047	Gray marly limestone, with some gray and maroon shale.
3047-3060	Platy gray shale.
3060-3080	Gray lime to gray and maroon shale.
<u>Lansing-Kansas City 3080-3100</u>	
3080-3085	Gray shale and limestone shells.
3085-3100	Platy gray shale.
3100-3140	Alternating beds of gray limestone and dark gray shale. <u>Tricites cullomensis.</u>
3140-3200	Buff dense limestone, gray, grading downward to buff sucrose.
3200-3205	Buff sucrose limestone, trace of chert.
3205-3215	Buff sucrose limestone.
3215-3220	Buff sucrose limestone and some gray shale.
3220-3230	Buff dense limestone.
3230-3250	As above with traces of maroon shale.
3250-3255	Gray granular marly limestone. <u>Triticites cullomensis, & T. sp.</u>
3255-3260	Granular gray and maroon shale.
3260-3280	As above with gray cherty limestone.
3280-3288	Buff limestone and some dark chert.
3288-3295	Green shale.
3295-3310	Buff limestone, many fragments of <u>Fusalisids.</u>
3310-3333	Buff limestone and black shale.
3333-3344	Gray green shale.
3344-3358	Gray green and maroon shale, and buff limestone. <u>Triticites sp.</u>
3358-3365	Gray green shale/
3365-3375	Gray green and maroon shale, and buff limestone.
3375-3385	Tan chert with some limestone.
3385-3388	Buff limestone.
3388-3391	Buff limestone and tan chert.
3391-3395	Gray to buff limestone.
3395-3400	Gray green shale.
3400-3412	Gray green and maroon shale.
3412-3417	Maroon shale, gray shale, and buff limestone. <u>Triticites sp.</u>
3417-3435	Buff limestone with gray and maroon shale.
3435-3440	Gray granular limestone.
3440-3445	As above with gray green shale and show of oil.
3445-3462	Buff limestone and maroon shale.
3462-3470	Maroon shale with some limestone.
3470-3483	As above with gray green shale.
Note: On lithology the section from here on down looks like Marmaton and Cherokee, but no Fusulinellas could be found.	
3483-3485	Gray green shale.
3485-3492	Gray to black shale with some limestone.
3492-3505	Gray shale and white limestone. <u>Triticites sp. thin wall</u>

Figures Indicate Bottom of Formation

3505-3510	Gray shale, light limestone, and tan chert.
3510-3515	Gray shale and light limestone.
3515-3520	Gray green shale.
3520-3530	Dense buff limestone and gray shale.
3530-3545	Gray shale with some limestone.
3545-3560	Dark gray shale, trace of maroon.
3560-3565	Gray black shale and buff limestone.
3570-3575	Buff limestone.
3575-3580	Maroon shale.
3580-3590	Maroon shale, some limestone, with trace of sandstone.
3590-3600	Variegated shale with some limestone.
3600-3610	As above with some chert.
3610-3615	White chert as above, show of oil.
3615-3620	White cherty limestone.
3620-3635	Maroon shale.
3635-3640	Maroon shale with weathered cherty limestone.
3640-3644	Maroon shale and some gray green shale.
3644-3648	Red and green shale, frosted sand, chert conglomerate oolitic.
<u>Ozarkian in part</u> 3648-3660	
3648-3660	Buff sucrose dolomite, porous, some oil stain.
3660-3665	As above and some frosted sand.
3665-3680	As above with trace of green shale.
3680-3695	Buff sucrose dolomite, much cave with more frosted sand in the lower part.
3695-3705	Buff sucrose dolomite and frosted sand, trace of green shale, <u>cavings</u> .
3705-3710	As above.
3710-3775	Buff sucrose dolomite, coarsely crystalline.
3775-3785	Buff sucrose dolomite, porous, frosted sand, and dolomite.
3785-3792	As above, not as much sand.
3800-3810	Buff sucrose dolomite, frosted sand.
3810-3816	As above, trace of green shale, more sand.
3816-3822	Pale green shale and frosted sand.
3822-3824	Frosted sand and buff dolomite.
3824-3836	Mostly frosted sand with much caving.
3836-3850	As above with red and green shale which may not be caving.